

SHORT
DIRECTIONS

FOR THE MANAGEMENT OF

2

I N F A N T S.

BY T. MANTELL, SURGEON,
AND PRACTITIONER IN MIDWIFERY,
AT DOVER.

IT IS THE VOICE OF NATURE, AND IT MUST
BE HEARD.

HURST,

L O N D O N :

PRINTED FOR T. BECKET, PALL-MALL,
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OF WALES, AND TO THEIR ROYAL HIGHNESSES
THE PRINCES.

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P R E F A C E.

IT is generally allowed, that the diseases most incident to infants, of all others, are least known. Most of those disorders which afflict us in our riper years, having been accurately described,

and their mode of treatment skilfully pointed out; but that diseases which carry off so many of our species, should have been so immaterially attended to, is remarkable.

As some notice has lately been shewn to the subject, we have reason to hope, this part of our practice will be at least improved, and that we shall be better able,
than

than we have hitherto been, to relieve the most helpless part of the creation.

Though writers both antient, and modern, may differ in their opinions on this subject, yet they all agree, that most of the disorders, which afflict new-born children, are caused by mismanagement.*

a 3

Are

* In treating their diseases, as well as in nursing them, I am very sure, many capital errors

Are there in the brute creation,
many animals whose young are
tor-

errors are committed.

Dr. CADOGAN's Postscript to a late edition of his Essay on Nursing.

The extraordinary havock made by diseases among children, is owing to the unnatural treatment they meet with, which is ill suited to the singular delicacy of their tender frames.

Dr. GREGORY, in his comparative View of the State and Faculties of Man, with those of the Animal World.

By the proportion of mankind that die in infancy, every person of reflection must be
con-

tormented by disease, or mothers who lose their offspring by sickness? Instinct directs them, and why should not we follow this unerring principle of nature, when its dictates so plainly coincide with those of reason.

Dr. Gregory observes, the comparative anatomy of brute animals,

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convinced, there must be some fatal, and very general error, in breeding them.

Dr. WILSON's Aphorisms on the Constitution and Diseases of Children.

mals, hath been cultivated with some attention, and hath been the source of the most useful discoveries in the anatomy of the human body; and why should the comparative animal œconomy of mankind, and other animals, be so much regarded, and the comparative views of their state and manner of life, be so little attended to?

It

It may be allowed, that human nature entails some hereditary evils on us, which the brute creation have not; but we must look further, if we wish to account for the great number of infants which are cut off thus early, and sent out of the world almost as soon as they come into it.*

If

* Few of hereditary diseases appear in infancy, or even in childhood.

Dr. ARMSTRONG on the Diseases
most incident to Children.

Few

If we examine the bills of mortality, and reflect on the number of infant deaths* they contain, it
clearly

Few or none of the diseases proper to infants, are owing to any hereditary taint or vice, originally inherent in their constitutions. Nature generally brings them into the world with sound stamina.

Dr. WILSON.

It is very seldom that young children are troubled with family complaints.

Dr. CADOGAN.

* The bills of mortality in London shew, that nearly one-half of the number which are baptized, die under two years of age.

By

clearly demonstrates, that we do not manage them properly. One of the best writers* on the subject, supposes this mortality is greatest among the most luxurious part of man-

By consulting Sympson's Tables of the Degrees of Mortality of different Ages, it appears, that of a certain number of children born at the same time, more than a fourth of them died in the first year, more than a third in two years, and at least one-half in the first three years.

By Buffon's Calculations, more than a fourth die under one year of age.

* Dr. GREGORY.

mankind, and gradually decreases, in proportion as the diet becomes simple, the exercise more frequent, and the general method of living more hardy. *

One circumstance worthy of remark, is, that the number of infants who have died in London,

* Many others are of the same opinion: Rousseau says, “ L’expérience apprend qu’il meurt encore plus d’enfans élevés délicatement que d’autres.”

don, according to the bills of mortality, for the last ten years, under two years of age, has been less, by upwards of sixteen hundred annually, than we find it used to be for many years before.*

May

* In the bills of mortality for London, from the year 1730 to 1775, there died, on an average each year, under two years of age, 8450 out of 15890 that were baptized, the proportion of which is nearly as 8 in 15: by the same bills of mortality, from 1775 to 1785,

May we not attribute this to a more rational, and better mode of

1785, there died annually, under two years of age, 6800, and were baptized annually, 17250, which shews the proportion to be not so much as 7 in 17.

Throughout England, the proportion in large towns is similar; in remote villages, the deaths are fewer in proportion; in those parishes *near*, more than in those *in* populous towns, numbers being continually sent to be nursed in the adjacent country. This observation is one that Buffon takes notice of, by the number of infant deaths being proportionably

of treating children, that has taken place among numbers of the community? And does not the success warrant our pursuing such an improved plan more generally, and inculcating its precepts more universally?

It

tionably more in parishes in the vicinity of Paris, than in the parishes in that city.

Dr. WHITE supposes one principal cause of the increasing population of York, is owing to a general improvement, and greater attention to nature, in the management of infants.

It is this idea, which has induced the Author to publish the following Directions: fifteen years practice has enabled him to make observations, of the good accruing from the new mode, and the mischiefs arising from the treating of infants, according to the old method.

He does not arrogate to himself, the liberty of directing the medical

cal

cal practitioner, the advice he gives is to the mother,* and as it is such as science approves,† and success establishes, he thinks it cannot be too universally known.

b The

* C'est a toi que je m'adresse tendre et pre'voyante mere, qui fus l'ecarter de la grande route, et garantir l'arbrisseau naissant du choc des opinions humaines.

ROUSSEAU.

† Dr. CADOGAN wrote on the subject, and enforced this method near forty years since.

The merit of curing diseases, is not greater, than that of preventing them; and if we cannot always, in every period of life, avoid “*the heart-ach, and the thousand natural shocks that flesh is heir to,*”* yet by attending to the simple dictates of nature in the infant state, before they are controul’d by passions, or perplex’d with cares; many evils

* SHAKESPEARE.

evils may be prevented, that cannot be easily remedied. Though we come into the world, more helpless than any other creature; yet we are capable of receiving every requisite assistance; and even of expressing by signs the nourishment we need.* Our mothers watch our wants with
that

* Nous naissons foibles, nous avons besoin de forces ; nous naissons dépourvus de tout, nous avons besoin d'assistance, nous naissons
stupides,

that unbounded tendernefs every animal fhews its offspring ; and fuperior to that of the brute creation, as much as our fenfe, reafon, and religion, exalt us above them.

A mother

ftupides, nous avons befoin de jugement ; tout ce que nous n'avons pas à notre naiffance, et dont nous avons befoin etant grands, nous eft donne par l'education.

ROUSSEAU.

A mother is ready to learn, and willing to do every thing in her power, for the good of her offspring; to prevent its complaints, her endeavours can never be wanting.* When easy and salutary rules are enforced to obtain this desirable purpose; it is much to be hoped, that they will
superfede

* La mere veut que son enfant soit heureux, qu'il le soit dès a présent, en cela elle a raison, quand elle se trompe sur les moyens, il faut l'eclairer.

superfede those, which ignorance has invented, and custom established, as they will be found by experience, to promote the health, and the happiness of infants.

Conscious that these directions are such, as will contribute to this great end, the author submits them to the candor, and to the attention of the public.

Dover, Dec. 14,
1786.

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DIREC-

D I R E C T I O N S

FOR THE MANAGEMENT OF

I N F A N T S

S E C T. I.

Treatment at the birth.—Of dressing, warmth, and air.—The first wants regarded, by applying to the breasts early.

THE birth of a child is attended with one of the greatest, and most wonderful changes, it can ever ('till death) experience. From being wholly dependant on its mother, it

A

be-

becomes a distinct being, with the power of existence in itself; it is in a new atmosphere, in which it cannot live any longer than its arteries will beat, and its lungs respire.

A conflict always ensues in the change of circulation at the birth, and in the respiration necessary to animal life; and this conflict has been sometimes, we are told, fatally ended by the efforts of art.* This should learn us, not to be too much in a hurry in separating the child and placenta, but give time for the great change.

* See WHITE's New Directions concerning the Delivery of the Child and Placenta.

change gradually to take place, as it is evident nature intended it should.

A period of rest is afterwards necessary, for the new and various business, that is commencing in the little animal frame, to go on undisturbed and unobstructed.

When it is taken by the nurse to dress, its friends design it should receive every comfort its helpless destitute state requires. To do this, all the assistance necessary, is, first to wash it with cool water, or warmed in a very moderate degree, and afterwards to put on its dress loosely, with the aid of as few pins as possible, and

those very carefully used. The first dresses should be warm, though light and roomy; all rollers, stays, or bands, should be avoided as much as possible, and those used should be put on so perfectly easy, as not to obstruct circulation, or to counteract the very purpose they were intended to answer.* This done, it should be wrapt up warm, for heat in the extreme, to an infant newly born, is hurtful. We learn

* Is it not an instance of superior wisdom in those nations, who simply clothe their infants, without tormenting them with swadling bands? The Siamese, the Indians, the Japanese, the Negroes, the Savages of Canada, of Virginia, of Brasil, and almost all the inhabitants of South America, lay their infants naked into hanging beds of cotton, or put them into cradles lined with fur. These practices are both sensible and humane.

BUFFON.

learn from the history of those people, who have not yet departed far from a state of nature, that they make use of cold bathing without injury ;*

A 3. but

* The Americans that inhabit the Isthmus of Darien, make no difficulty of plunging into cold water when they are in a sweat, to cool themselves ; likewise the mothers, with their children, bathe in cold water immediately after they are brought to bed.

BROOKE'S Natural History, vol. i. p. 175.

The inhabitants of the northern regions are firmly persuaded, that cold bathing makes men more healthy and robust, and therefore they inure their children to this habit from the very birth.

BUFFON.

When a woman is delivered of a child, another woman takes it in her arms, within half an hour or less after it is born, and takes the lying-in woman upon her back, and goes with both of them into the river, and washes them there.

Description of the Isthmus of America, in

DAMPIER'S Voyages, vol. iii. p. 360.

but our climate, and our luxurious mode of living, renders either extreme in general indiscreet. The child, when dressed, should be laid in a cool room, where the air is free, and uncontaminated by the breath of many people; which it is to be hoped the mother's apartment is;* for pure air to her is salutary, as well as to the child.

Here

* When a woman is in labour, she is often attended by a number of her friends, in a small room with a large fire, which, together with her own pains, throw her into profuse sweats; by the heat of the chamber, and the breath of so many people, the whole air is rendered foul and unfit for respiration.

WHITE's Treatise on the Management
of Lying-in Women.

Air in which animals have breathed, is in all respects the same with air in which animals have putrefied.

Dr. PERCIVAL.—See WHITE's Treatise, p. 5.

The

Here it should lie several hours. It wants nothing immediately. If it cries, it is not for food. Nature will soon point out its wants; “it will ask, *plain as expressive signs can ask*, its mother’s milk,” † and it ought then to have it. †

A 4

This

The room in which they are kept should be large, and the air cool, free and pure.

Dr. FOSTER’s Principles and Practice
of Midwifery, aphor. dxcvii.

† Dr. DOWNMAN.

† Those who are unwilling or unable to attend to these circumstances, (applying the child to the breast early) are subject to milk fevers, to the consequences of the confinement and accumulation of that fluid, and to inflammation and suppuration of the breasts.

HAMILTON on the Diseases incident
to the Child-bed State.

This nutriment is far superior to any we can substitute; though the quantity may be small which the child can at first procure, it is salutary; and the advantages gained by these early attempts, are as beneficial to the mother as they are to the infant*.

* Any obstruction, either of the gland or duct, is capable of producing a disease; and if we examine to what this obstruction owes its rise, it will lead us to consider that when the child is born, the milk comes gradually into the breast, or reservoir, at first in small quantities, but generally sufficient for the support of the child, independent of other food; and where custom has not led the good woman to act contrary to the laws of nature, this obstruction will seldom be met with, and the child will be properly supported. On the other hand, if the child is not put to the breasts before the third day, the breast becomes full and turgid, and more or less painful: at this state, as it is not at all uncommon for little hardneſſes and indurations to appear, the child is unable to draw forth the milk, and other means must be made use of.

CRUTWELL'S Advice to Lying-in Women, respecting the Custom of drawing the Breasts.

S E C T. II.

Mothers suckling their own children recommended.—Bad health sometimes a frivolous excuse.—Nutriment proper.—Nurses diet.—Times proper for feeding.—Sucking children require nothing more than the breast before they are two or three months old.

BUT suppose the mother does not intend to nurse her own child!—This I will hope can never be the case, without dire necessity compels it. In the enlightened age we live in, we have no fashion that reflects

reflects such amiable honour on its followers, as the maternal attention many ladies at present shew their offspring. The writers who have touch'd on the subject, have pressed it with energy, and forcibly inculcated their doctrine to parents, which has not been without effect.* Several of the
first

* Dr. DOWNMAN, in particular, in the following lines

O Mother (let me by that tenderest name
Conjure thee) still pursue the task begun;
Nor unless urg'd by strong necessity,
Some fated, some peculiar circumstance,
By which thy health may suffer, or thy child
Suck in disease, or that the genial food
Too scanty flows, give to an alien's care
Thy orphan'd babe.—O, if by choice thou dost—
What shall I call thee?—Woman?—No! though fair
Thy face as one of the angelic choir;
Though sweetness seem pourtray'd in every line,
And

first female characters in the kingdom
 have set an example to the world, in
 nursing.

And smiles, which might become a Hebe, rise
 At will, crisping thy rosy cheeks; though all
 That's lovely, kind, attractive, elegant,
 Dwelling in thy outward shape, and catch the eye
 Of gazing rapture, all is but deceit;
 The form of woman's thine, but not the heart;
 Drest in hypocrisy, and studied guile,
 This act detects thee; shews thee to have lost
 Each tender feeling, every gentler grace;
 And virtue more humane, more finely drawn,
 And set by yielding nature in the breast
 Of female softness; to have driven forth these
 By force, to have unsex'd thy mind, become
 The seat of torpid, dull stupidity,
 Cold and insensible to the warm touch
 Of generous emotions, lock'd up close
 To shut out pity's entrance, who retreats
 Repining from her heaven-destin'd seat,
 Usurp'd by cruelty, the worst of fiends.

When a mother does not nurse her own infant, she
 does open violence to nature.

Dr. GREGORY.

nursing their own infants, and have equalled “ the mothers in the most polished nations, in the purest ages of Greece and Rome.”* Without doubt, the event will be most pleasing; the prospect gives us reason to hope that Britons will not, in the next generations, be stiled “ *a puny, valetudinary race.*” †

It is allowed, necessity will sometimes prevent a mother from giving the breast, yet bad health can be but
feldom

* Dr. GREGORY.

† For such, Dr. CADOGAN says, most of our people of condition are, chiefly owing to bad nursing, and bad habits contracted early.

See Essay on Nursing.

Seldom a real cause;* there may be other circumstances which render it necessary to rear the child in a less natural mode. If a nurse's breast be substituted for the mother's, it ought to be a nurse, whose milk is new, whose method of living is guided by temperance, and whose constitution is untainted by disease; or we had better

* Many and frequent are the instances of bad health and sickly constitutions being restored and improved by nursing, and as many that are occasioned by a want of it; nervous and hysterical complaints are generally surprisingly benefited by it.

Moss on the Management and
Nursing of Children.

CADOGAN says (of giving suck) that the mother would, in most hysterical nervous cases, establish her own health by it, though she was weak and sickly before.

See Essay on Nursing.

ter bring it up by hand, and endeavour to provide it nourishment, from aliments, similar as we can to that which the breast supplies.

Milk is of a nature between animal and vegetable food; it varies according to the diet of the person who gives it. It is proved by an ingenious and learned writer,* that acid abounds in the milk of different animals, in proportion to the quantities of vegetables they eat.

The milk of cows, asses, or goats, and weak broths, joined with some
fari-

* Dr. YOUNG. De Natura & Usu Lactis in diversis Animalibus.

farinaceous substance, as bread, flour, biscuit, rice, or semolina, is the most proper artificial food that we can substitute for that which the breast supplies; but this we must use sparingly; and vary it, in the farinaceous part, as may be found expedient: if we find it disagrees from acidity, the milk should be changed to the broth, which must be weak, and made from the lean of young meat, beef or mutton not excepted. That kind of broth called beef tea, is very proper for the purpose. It must be observed, all these aliments should be prepared in tin utensils, and should be made fresh once or twice a day.

Nurses

Nurses should not be debarred vegetables entirely; for notwithstanding their ascessancy, it is sometimes requisite for the health of those that give suck, and of course their children. The indulging freely in fruits *
and

* Fruits, vegetables, and all kinds of acids, or ascessant food, have generally been denied to nurses, upon a supposition that they created acidities in the childrens bowels; this in some constitutions they certainly do, but the rule is by no means general. I have known nurses abounding in acrid putrid bile, indulge freely in these kinds of food, with great advantage to themselves, and no disadvantage to their infants.

WHITE'S Treatise on the Management of
Pregnant and Lying-in Women.

A nurse ought to have great regard to her diet; it is not enough that she be sober and temperate; her food should consist of a proper mixture of flesh and vegetables; she should eat one hearty meal of fresh meat every day, with a good deal of garden stuff and a little bread.

Dr. CADOGAN.

and vegetables, may prevent many complaints bilious constitutions are liable to, from being confined wholly to animal food.

The indulgence (for nurfes) in the ufe of wine, fpirits, or any fermented liquors, fhould be regarded with extreme caution, and regulated with the nicest care.

In regard to the time proper for feeding infants, it is neceffary to fay, it is no matter how many times in a day, if they are not fed too much at once; if at firft ufed to have their victuals late at night, and early in the morning; they will never want it in

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the

the intermediate space. We must remember, the cause of their crying, is more frequently from having *too much*, than *too little*, in their stomachs.*

This same observation, should be regarded in those that suck, as well as in those that do not suck; their stomachs are as frequently overloaded: and the same rule should be observed to infants that have the breast, to give it them late at night, and early in the morning.† It is of material
con-

* It is certainly a preposterous thing, to think of feeding a child because it is sick, though possibly this may stop its mouth for a little while. Dr. CADOGAN.

† In the night it is not necessary, either that the
breast

consequence for both mother and child, to rest a few of those hours ordained by Providence for sleep ; custom will soon reconcile it to the child, and it will not be expected or wanted, if it is not at first beginning complied with.

It is right we should know, that milk does not flow into their stomachs, so fast from the breast, as we give it them by the pap-spoon ; and this should learn us to feed them slowly.

B 2

The

Breast should be administered, or that any kind of food should be given the infant.

WHITE's Treatise on the Management
of Lying-in Women,

The invention of horns, sucking bottles, and many other contrivances for artificial nipples, are too lame and imperfect imitations of nature to be useful. All the utility that can be attributed to these poor pieces of art, is the benefit of receiving the food slowly by them, and of its being mixed with a proportion of saliva, excited by the motion of sucking. The first is easily remedied, by feeding them slowly with the spoon; and the second more than compensated, when we consider, as these machines cannot be kept perfectly clean, the victuals that hangs about them, will be liable to become in a few hours, very unfit for a nice taste to swallow, or a delicate stomach to digest.

For infants who have the blessing of a mother's breast, there is no need to give any directions *how* they should be fed; for before they are two or three months old, they should not be fed at all.* They cannot have any thing so salutary as their milk, nor can they need any thing in addition to it. If it disagrees with them, it must be from the mother's diet, or health. To remedy the latter, or al-

B 3 ter

* For the first two months the infant should receive no other food, than the milk of the mother, or nurse; and, if its constitution be delicate, this nourishment alone should be continued during the third, or fourth month: a child, however robust, may be injured, if any other food be administered before the end of the first month. In Holland, in Italy, in Turkey, and through the whole Levant, children are allowed no other food, during the first year. BUFFON.

ter the former, should be carefully attended to, instead of cramming down additional aliment, when perhaps the cause of their complaints proceed from the stomach being already oppressed by fulness.

The feeding them a little once a day, after they are two or three months old, is in general not improper; and the increasing the quantity, as well as adding to the quality of their food, may then be gradually introduced. At the age of five or six months, the number of the meals may be increased, to two or three each day; and about the time the teeth are beginning to shoot, a little animal food may be allowed

allowed them once a day. It is necessary to remark, that it should not be given when there is any degree of fever, or any complaints from the pain of cutting teeth. When this is the case, it is requisite to keep a lower regimen; to remedy costiveness, by the liberal use of magnesia and manna: but if the symptoms of disorder are violent, the assistance of a skilful medical practitioner will be necessary to relieve them.

S E C T. III.

Complaints arising from dentition.—
Healthy children feel the least from
cutting teeth.—Mode of feeding dis-
approved.—Caution against wine, spi-
rits, and quack medicines.

I Must allow that the complaints arising from dentition are many, and that a very great number of infants die at this fatal period; yet I should hope not the proportion that Dr. Arbuthnot supposes, *one in ten*: be this as it may, it is an object highly deserving our attention. To alleviate the pain of cutting teeth, to prevent
disease

disease in consequence, and to lessen the number of its victims, are matters to be considered. What Dr. Gregory says, coincides with Dr. Cadogan's opinion. “ This is reckoned a
 “ natural and inevitable evil; but as
 “ all other animals, and the uncultivated part of mankind, get their
 “ teeth without danger, there is reason to suspect this is not a natural
 “ evil. The process of nature in
 “ breeding teeth, is different from
 “ her usual method of operating in
 “ the human body, which is without
 “ pain, and commonly without exciting any particular sensation. But
 “ though cutting of the teeth may
 “ be naturally attended with some
 “ pain,

“ pain, and even a small degree of
 “ fever, yet if a child’s constitution be
 “ perfectly sound and vigorous, pro-
 “ bably neither of these would be fol-
 “ lowed by any bad consequence. The
 “ irritability of the nervous system,
 “ and the inflammatory disposition of
 “ the habit at this period, are probably
 “ owing, in a great measure, to too
 “ full living, to the constitution be-
 “ ing debilitated by the want of pro-
 “ per exercise, by the want of free
 “ exposure to the open air, and the
 “ numberless other effeminacies of
 “ modern education. Other animals
 “ facilitate the cutting of their teeth,
 “ by gnawing such bodies, as their
 “ gums can make some impression
 “ on

“ on. An infant, by the same me-
 “ chanical instinct, begins very early
 “ to carry every thing to its mouth.
 “ As soon as this indication of na-
 “ ture is observed, it should be dili-
 “ gently followed, by giving the child
 “ something to gnaw, which is inof-
 “ fensive, which is cooling, and which
 “ yields a little to the pressure of its
 “ gums, as liquorice root, hard bis-
 “ cuit, wax candle, and such like;
 “ a perfectly hard body, such as co-
 “ ral, does not answer the purpose,
 “ nor will a child use it, when its
 “ gums are in the least pained.” *

These

* Breeding teeth has been thought to be, and is fatal
 to many children ; but I am confident this is not from
 nature ; for it is no disease, or we could not be well in
 health

These opinions authorize me to assert with confidence, what I have observed from experience, that those children who are healthy, of a lax habit, and live abstemiously, in general suffer little ; but that those who are gross, and full of humours, as well as those who are debilitated by disorders prior to this period, are the greatest sufferers from dentition.

It is therefore evident, in order to lessen their afflictions, we should regard the regimen from the very birth, and

health till one or two and twenty, or later. Teeth are breeding the greatest part of that time, and it is my opinion the last teeth give more pain than the first, as the bones and gums they are to pierce, are grown more firm and hard.

Dr. CADOGAN.

and by this means, render their constitutions free from bad humours, and uninjured by disease.

The quality of the victuals for sucking children, (after they are two or three months old) should be the same as for those which are brought up without the breast, paying the same regard to changing the farinaceous part of it, if it is needful.

As the spoon is advised to be used for feeding, in preference to any other mode that requires suction, (and by that means causes a little saliva to be swallowed with the food) it is necessary to say, that the saliva of aged people

people is very different from that of infants, and that the custom of the nurse's putting the spoon in her own mouth, before it goes into the child's, is as unwholesome as it is indelicate; other means may be easily used, to discover whether the pap is too hot or too cold. As this advice may seem to some people of very little consequence, it is proper to observe further, that by this mode of feeding, there may ensue *dangerous*, as well as *unwholesome* effects; for by this means the child is liable to be infected with many bad distempers, as well as many of the chronical complaints a nurse may chance to be subject to.

It

It is best to feed the child, sitting up, as that is an easier posture for swallowing, than laying on its back.

Sugar should be used sparingly; no wine or spirits, on any pretence whatever, must be given an infant—as a medicine, it would require medical skill to administer, but given injudiciously, it is poison. All quack medicines for infants, require an equal caution how they are used; one, under the name of a cordial, has by its soporific powers put many an infant to sleep, that has never waked again. Such children whose constitutions have been so robust, as to resist its first powerful sedative effects, have by too
fre-

frequent repetition of its use, had their fabric too much injured, for nature to relieve, or art to remedy.

SECT. IV.

Natural sleep necessary.—Rocking useless.—Cautions to prevent squinting.—Air, exercise, and cleanliness recommended.—Fragrant scents to be avoided.—Marks, supposed to arise from the mother's longings, not to be regarded.

NATURAL sleep cannot be too much encouraged, and if the child is perfectly well, it will sleep, for the first two months, two thirds of its time.

The custom of rocking in a cradle,
is unnecessary, and it will never be
C wanted

wanted, if it has never been used.*

A cradle is a convenient little bed, to remove into any room, and if it does not rock, the use of it cannot be objected to. It must be observed though, if the head is lined, it should be with plain green paper.

An infant is generally pleased by the motion, which a nurse gives it in her arms, and on her knees; but this exercise should be very gently used

* This agitation (rocking) confuses the brain, stops the crying, and if long continued, fluns the child into sleep; but this forced and unnatural sleep is only a palliative, it removes not the original cause of complaint: long and violent rocking, on the contrary, may disorder the stomach and head, and lay the foundation of future complaints.

BUFFON.

used, and only when it is awake, and lively.*

As children naturally turn their eyes to the light, their beds or cradles should be lighted from the feet, in such a manner as that both eyes may be equally exposed to it. If the light is on one side, the eye that is most frequently directed to it, will become the strongest: this is likewise a frequent cause of squinting. To prevent which, it is also necessary the child should not have a nurse or ser-

C 2

vant

* Children should have their exercise proportioned to their tender years, violent tossing or agitation being very improper for them.

Foster's System of Midwifery, aphor. dxcix.

vant about it, with that imperfection.*

Air, and exercise without doors, is very salutary, regard being paid to weather. Cold bathing is equally so, though it is not always to be used in the extreme. We should consider the climate, and the subject. We are not habituated to many vigorous customs practised by savage nations, and in a new born state, we are badly qualified to stand the shock of too sudden transitions. This can easily be remedied, by tempering the bath to that degree of warmth, which will not be unpleasant

* Dr. GREGORY, from BUFFON. See Mem. de l'Acad. des Sciences, Année 1743.

fant to the infant, and by gradual means, in a little time we may bring it to any degree of cold we please.

In the present improving mode of nursing, cleanliness is so nicely observed in general, as to require no arguments to enforce its salutary practice, except to say, that it should commence from the birth. The idea some people entertain, of fresh linen weakening new born children, is a very erroneous one; and the waiting till after the ninth day, or any particular period before they are allowed to have this comfort, is as absurd. If the linen is perfectly dry and well aired, it may be changed safely at any time.

As the olfactory nerves of infants are irritably nice in an extreme degree, we should avoid the use of perfumes in the nursery, or the too strong and fragrant scent of flowers.

From some instances I have seen, I have reason to think, infants are sometimes liable to be affected from this cause, in a peculiar manner. We know it is no very uncommon thing, for adults to be disordered by the smell of flowers ; it is therefore very probable, an infant's nerves may be more frequently, as well as more violently affected by them.

Their other senses, of hearing, and
seeing,

feeling, are equally as nice. We constantly see the effects a sudden strong light will give them, as we do the surprize they start with at a violent sound; and as their little fabrics are hurt by such shocks, it is only necessary to say, we should as much as in our power, prevent their feeling them.

No regard should be paid to any marks the child may have, which are supposed to arise in consequence of the mother's longings; the custom of feeding it with many improper things on that account, is often injurious to the health; whereas no mischief can accrue, by the omission of this too officious care.

In regard to the effects of imagination in pregnant women, it remains a disputed point, whether their wishes, hopes and fears, can, or cannot have any effect in producing a præternatural formation of the fœtus. Nerves are found to be the seat and conveyers of sensation, and as no nervous communication between the mother and fœtus, has ever yet been discovered, it gives anatomists reason to think it cannot be; yet we are obliged to confess there are some very stubborn facts against us; and I am, on the whole, disposed to think that there is some medium, the nature of which we are yet unacquainted with, which produces some mysterious communication between the nervous system of the mother and child.

SECT.

S E C T. V.

Of infantile diseases in general.—The thrush.—The red gum.—The jaundice.—Excoriations.—Tumors of the breasts.—Inoculation.—Hooping cough, and measles.—The rickets.—Time for weaning, and walking.

THE natural diseases of infants are not many, or difficult to understand, and by skilful and attentive treatment, they are in general easily relieved. The unnatural ones, or such as we bring on by mismanagement, are not more difficult to cure. To remove the cause that brought them

them on, is frequently all the assistance necessary. Nature, if not thwarted too much, will again take the lead, and re-establish health. *

Many of their complaints have their first cause from acidities in the stomach: it is therefore necessary, to be very careful and attentive to this matter,

* If we will only give ourselves the trouble of examining the subject attentively, we shall soon be convinced, that though a great part of the human species die in infancy or childhood, and though many of them are cut off by diseases peculiar to infancy; yet their disorders are not so numerous, nor so hard to be accounted for, as to one unacquainted with the subject would at first sight appear.

ARMSTRONG'S Account of the Diseases most
incident to Children.

matter.* Changing the diet of the child, or altering the food of the mother, will frequently prevent, and the use of magnesia will generally remove these acidities, and relieve the various disorders proceeding from such causes.

The thrush, † and the disorder called the red gum, are generally expected

* The first and general cause of most of the diseases infants are liable to, is the acid corruption of their food.

Dr. CADOGAN.

† Thrush is a disease frequently attendant on early infancy, though incident also to a more advanced age; its nature seems little understood, and its treatment so injudiciously conducted, that many children are destroyed by the officiousness of unskilful practitioners.

HAMILTON'S Midwifery.

The

pected within the first three or four months. I have heard expressions of uneasiness, from tender parents, because the thrush had not yet appeared in their child. The idea that infants must have it, and the notion that they cannot have it but once, is the poor, erro-

The thrush is attended with many bad symptoms, and often endangers the child's life.

ROSENSTEIN on the Diseases
of Children.

The thrush is a disease of considerable importance, both as very tedious, and baffling the most judicious treatment.

FOSTER'S Aphorisms, DCXXX.

It is amongst the vulgar errors, that the thrush is a very harmless complaint, or is even desirable to a child in the month.

UNDERWOOD'S Diseases of Children.

erroneous reason for wishing such a disorder to commence.

The use, in the smallest degree, of vinous, or spirituous liquors, is sufficient cause for bringing on the disease; even the mother who gives the breast, will do it, if she drinks large quantities of fermented, or small portions of spirituous liquors; * without this cause, acidities in the stomach may sometimes occasion it. When it is slight, little more is necessary, than giving magnesia and rhubarb; but when it is bad, it requires medical skill to relieve it.

The

* The different causes are difficult to be accounted for; but we may impute the disorder in general to the nurse.

The eruption of small red pimples,* which go by the name of the red gum, is a complaint unattended with danger, sickness, or trouble; and requires no medicinal help.

The yellow gum, or jaundice, is a real disorder, proceeding from obstructions of the bile; and frequently requires medical treatment.

Inflammations of the eye-lids, as well as complaints of the eye itself, are

* Every species of this eruption is produced by the same cause as the thrush, but can scarcely be termed a complaint, being a kindly effort of nature to throw off some acrimony; consequently an evidence of the strength of the constitution, as the thrush is usually of its weakness.

UNDERWOOD'S Diseases of Children.

are not uncommon to new-born children; strong light and cold air should be avoided to prevent, and the most simple applications used to remedy them.

Excoriations, or chaffings of the skin, are prevented or remedied, by cleanliness, washing with cold water, and using a little unscented powder. Those behind the ears sometimes require medicines and alteration in diet; as do scald heads, and eruptions of various other kinds, that proceed from plenitude, bad humours, or gross habits.

The custom of nurses, in rubbing and squeezing the breasts of infants,
to

to force out milk, is hurtful; and though frequently practised, it ought to be totally abolished.*

The

* A milky fluid often spontaneously runs out from the nipples, but the unnatural though common method of forcibly squeezing the delicate breasts of a new-born babe, by the rough hand of the nurse or midwife, ought in no instance to be practised; inflammation, suppuration, abscess, and their consequences often ensue, and besides the hazard of disagreeable marks in the bosom of girls, the woman, by that means, may be prevented ever in future from being able to give suck.

HAMILTON'S Treatise of Midwifery.

Some children, a day or two after they are born, will have the breasts exceedingly tumid, hard and painful, containing something like milk, and nurses imagine they do a great kindness in milking it out, as it is called; but I have often been grieved to see a nurse rudely rubbing, and even squeezing the breasts, already in a state of inflammation, and continuing it even for some minutes, though the child's cries might convince her she is putting it to pain.

UNDERWOOD on the Diseases of Children.

The practice of inoculation, at an early period of infancy, is as safe as at any time of life, though the delicacy of their frames, and the irritability of their system, renders them unable to struggle through the disorder of the small-pox, when taken naturally, and of the confluent kind; yet I have known frequent instances, of their passing effectually through the disease, by inoculation, so little indisposed as not to be perceived.

The whooping-cough, and measles, require the same kind of treatment in infancy, as in childhood; the latter disease may be infected by inoculation, with advantage, and safety.

The rickets being a disorder peculiar to the infant state, and a disorder which may be attributed to errors in management, it is necessary to point out the prophylactic method to pursue.*

Impure,

* This disease made its first appearance about the year 1620, in the west of England, in the counties of Dorset and Somerset; after that it spread gradually to London, Canterbury, and Oxford, and almost all the southern and western parts of the kingdom; but in the northern counties it very rarely appears, and is hardly well known, even at this day. (1650.)

GLISSON.

It is a disease not mentioned in the English bills of mortality before the year 1634.

The French call this disease *nouveurc*, and such children as have it *enfants noués*.

The Germans, as well as the Swedes, call it the *English disease*.

ROSENSTEIN.

Impure, or damp air, want of exercise, and improper diet (either of nurse, or child) are supposed to be the cause for generating it. That it is a disorder which may be transmitted from parents to children, we have many reasons to think probable; and that sloth, nastiness, and the intemperate use of spirits, will produce it, we have too many unhappy proofs.

A general regard, to pure air, moderate exercise, temperate diet, gentle friction, and cold bathing, is the most certain *preventative*, as well as most requisite *curative intention*; the latter of which may be assisted by the use of chalybeate waters.

The time for giving the breast to children, should never be longer than twelve months, or they may be as much sooner taken from it, as occurring circumstances indicate. The method of weaning them should be by gradual means, if they are used to be fed more every day, and not allowed to suck so much as usual, the change may be brought on imperceptibly, without disappointment to the child, or inconvenience to the mother. The instances of children, who suck two, or three years, being healthy and robust, does not imply, they would not be so, had they not the breast; and besides, in most cases, the mother's health must be injured, if it is continued

nued more than a year. The custom of rude nations, whose women give suck five, six, or seven years, proceeds from the necessities they are driven to, to procure sustenance for themselves;* but as Providence blesses our happy clime with plenty, we have no occasion to imitate the needy savages in this respect.

There is no particular rule to be observed, as to the period, that it is proper to put a child on its legs; in
D 3 this

* See ROBERTSON'S History of America, vol. ii. p. 106.

Ibid. vol. iii. p. 212.

RAYNAL'S History of East and West Indies, vol. v. p. 256.

this respect we must be guided by their strength; they will always make efforts to walk as soon as they are able. The use of leading strings, as well as all the various mechanic inventions for their support, are prejudicial, if too much stress is laid on them. A child whose legs are not strong enough to carry it, cannot have arms capable of supporting the weight of its body, without injury to the muscles, whose fibres are formed for different actions, and of course, if improperly exerted, may be the means of preventing the child, from arriving to that just proportion and symmetry, which it should be our endeavours, ever to aim at.

As

As soon as a child is able to walk, it commences a director for itself; it may be guided for its safety, and (as soon as it has sense to understand) persuaded for its welfare: but as the foundation has been laid, so will the fabric stand; the vigorous constitution, and the happy disposition, are then formed. Gratitude to their benefactors will not be wanting, if sense is not deficient, and the parents will have the lasting satisfaction, of having done their endeavours, to obtain for their offspring, one of the greatest blessings HEAVEN bestows.

P O S T S C R I P T.

TO elucidate the circumstance, which I have asserted, as worthy of remark, that the proportion of infant deaths, have been for ten years past, on an average, sixteen hundred less annually in London, than they were for forty years before, I beg leave to subjoin the following Table; which, to the curious, may shew the advantage we have gradually gained, by some improvements in the treatment of children.

The number of lives that are saved by inoculation, at first sight might be deemed

deemed a very principal cause, for lessening the number of infant deaths; but by a little inspection into the matter, it appears there are other reasons for this pleasing alteration.

Inestimable as the benefit of inoculation is to individuals, the world, or at least the metropolis, as yet gains little advantage from this ingenious practice, in regard to lessening the number of deaths by the small-pox.

The little care that is taken to prevent infection from spreading universally, makes those of the community who will not, as well as those who cannot adopt inoculation, suffer greatly.

ly: They are continually liable to receive infection, and notwithstanding the rational method, of treating the disease in every state, is now consonant to the laws of nature, yet it cannot save all of the numbers that are afflicted with this terrible and fatal disease..

T A B L E,

Extracted from the Bills of Mortality, of the numbers baptized; buried under two years of age; and the numbers that have died of the small-pox annually; on averages of five years, from 1730 to 1785, the first year exclusive, and the last inclusive.

	Baptized	Died under 2 years of age	Died of the small-pox
1730 to 1735	17517	10304	2040
1740	16149	10141	2079
1745	14419	8638	1654
1750	14496	8517	2051
1755	15119	7906	1933
			1755

	Baptized	Died under 2 years of age	Died of the small-pox
1755 to 1760	14469	6855	2192
1765	15925	8003	2546
1770	16420	7988	2300
1775	17284	7765	2367
1780	17256	7434	1816
1785.	17263	6188	1888

The number which have died of the small-pox, for fifty years before those in the preceding table, are still less, as the following extract from the Bills of Mortality evinces.

On an average of 10 years, from	Died of the small-pox annually.	Baptized annually.
1670 to 1680	1260	12325
1690	1664	14439
1700	1103	14938
1710	1255	15623
1720	1953	17111
1730	2304	18203

General

General average of fifty years, from
 1670 to 1730, died annually of the
 small-pox, - - 1589

The succeeding thirty years, from
 1730 to 1760, - - 1991

The next twenty-five years, from
 1760 to 1785, - - 2183

F I N I S.



